62. IT IS FURTHER ORDERED that the amendments to Part 25 of the Commission's rules, 47 C.F.R. Part 25, the Commission's forms and the Commission's policies as specified in this Report and Order WILL BECOME EFFECTIVE upon approval by the Office of Management and Budget of the new information collection requirements adopted herein, but no sooner than sixty days from publication in the Federal Register. This action is taken pursuant to Sections 4 and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154, 303(r), and Section 201(c) of the Communications Satellite Act of 1962, 47 U.S.C. § 721(c).

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton Acting Secretary

# APPENDIX A

# List of Parties Filing Comments

Comments: Due by October 4, 1995 American Mobile Satellite Corporation AT&T Corporation CTA Incorporated Comsearch **EDS** Corporation GE American Communications, Inc. Home Box Office Hughes Communications Galaxy, Inc. Hughes Network Systems, Inc. Loral/Qualcomm Partnership, L.P. MCI Telecommunications Corporation Motorola Satellite Communications, Inc. Orbital Sciences Corporation Orion Network Systems, Inc. PanAmSat Corporation Satellite & Production Services Teledesic Corporation

# Reply Comments: Due by October 25, 1995

American Mobile Satellite Corporation Comsearch CTA Incorporated Home Box Office Hughes Network Systems, Inc. Hughes Communications Galaxy, Inc. Iridium, Inc. Loral/Qualcomm Partnership, L.P. Motorola Satellite Communications, Inc. PanAmSat Corporation

#### APPENDIX B

#### Amendments to 47 C.F.R. Part 25 of the Commission's Rules

Part 25 of the Commission's Rules and Regulations (Chapter I of Title 47 of the Code of Federal Regulations) is amended as follows:

1. The authority citation for Part 25 continues to read as follows:

Authority: Secs. 25.101 to 25.601 issued under Sec. 4, 48 Stat. 1066, as amended; 47 U.S.C. 154. Interpret or apply secs. 101-104, 76 Stat. 419-427; 47 U.S.C. 701-744; 47 U.S.C. 554.

2. The Table of Contents for Part 25 is amended to read as follows:

# PART 25-SATELLITE COMMUNICATIONS

# Subpart A - General

# Sec.

- 25.101 Basis and Scope.
- 25.102 Station authorization required.
- 25.103 Definitions.
- 25.104 Preemption of local zoning of earth stations.
- 25.105-25.108 [Reserved]
- 25.109 Cross-reference.

## Subpart B - Applications and Licenses

- 25.110 Filing of applications, fees, and number of copies.
- 25.111 Additional information.
- 25.112 Defective applications.
- 25.113 Construction permits, station licenses, launch authority.
- 25.114 Applications for space station authorizations.
- 25.115 Applications for earth station authorizations.
- 25.116 Amendments to applications.
- 25.117 Modification of station license.
- 25.118 Modifications not requiring prior authorization.
- 25.119 Assignment or transfer of control of station authorization.
- 25.120 Application for special temporary authorization.
- 25.121 License term and renewals.

#### **EARTH STATIONS**

- 25.130 Filing requirements for transmitting earth stations.
- 25.131 Filing requirements for receive-only earth stations.
- 25.132 Verification of earth station antenna performance standards.
- 25.133 Period of construction; certification of commencement of operation.
- 25.134 Licensing Provisions of Very Small Aperture Terminal (VSAT) Networks.
- 25.135 Licensing provisions for earth station networks in the non-voice, non-geostationary mobile-satellite service.
- 25.136 Operating provisions for earth station networks in the 1.6/2.4 GHz Mobile-Satellite Service.

#### SPACE STATIONS

- 25.140 Qualifications of domestic fixed-satellite space station licensees.
- 25.141 Licensing provisions for the radio-determination satellite service.
- 25.142 Licensing provisions for the non-voice, non-geostationary mobile-satellite service.
- 25.143 Licensing provisions for the 1.6/2.4 GHz Mobile-Satellite Service.

## PROCESSING OF APPLICATIONS

- 25.150 Receipt of applications.
- 25.151 Public notice period.
- 25.152 Dismissal and return of applications.
- 25.153 Repetitious applications.
- 25.154 Opposition to applications and other pleadings.
- 25.155 Mutually exclusive applications.
- 25.156 Consideration of applications.

# FORFEITURE, TERMINATION, AND REINSTATEMENT OF STATION AUTHORIZATION

- 25.160 Administrative sanctions.
- 25.161 Automatic termination of station authorization.
- 25.162 Cause for termination of interference protection.
- 25.163 Reinstatement.

## Subpart C - Technical Standards

- 25.201 Definitions.
- 25.202 Frequencies, frequency tolerance and emission limitations.
- 25.203 Choice of sites and frequencies.

- 25.204 Power limits.
- 25.205 Minimum angle of antenna elevation.
- 25.206 Station identification.
- 25.207 Cessation of emissions.
- 25.208 Power flux density limits.
- 25.209 Antenna performance standards.
- 25.210 Technical requirements for space stations in the Fixed-Satellite Service.
- 25.211 Video Transmissions in the Domestic Fixed-Satellite Service.
- 25.212 Narrowband transmissions in the Fixed-Satellite Service.
- 25.213 Inter-service coordination requirements for the 1.6/2.4 GHz mobile-satellite service.
- 25.251 Special requirements for coordination.

# Subpart D - Technical Operations

- 25.271 Control of transmitting stations.
- 25.272 General inter-system coordination procedures.
- 25.273 Duties regarding space communications transmissions.
- 25.274 Procedures to be followed in the event of harmful interference.
- 25.275 Particulars of operation.
- 25.276 Points of communication.
- 25.277 Temporary fixed earth station operations.
- 25.278 Additional coordination obligation for non-geostationary and geostationary satellite systems in frequencies allocated to the fixed-satellite service.
- 25.279 Inter-Satellite Service.
- 25.280 Inclined Orbit.
- 25.281 Automatic Transmitter Identification System (ATIS).

## Subparts E-G [Reserved]

# Subpart H - Authorization To Own Stock in the Communications Satellite Corporation

- 25.501 Scope of this subpart.
- 25.502 Definitions.
- 25.503-25.504 [Reserved]
- 25.505 Persons requiring authorization.
- 25.506-25.514 [Reserved]
- 25.515 Method of securing authorization.
- 25.516-25.519 [Reserved]
- 25.520 Contents of application
- 25.521 Who may sign applications.
- 25.522 Full disclosures.
- 25.523 Form of application, number of copies, fees, etc.

- 25.524 [Reserved]
- 25.525 Action upon applications.
- 25.526 Amendments.
- 25.527 Defective applications.
- 25.528-25.529 [Reserved]
- 25.530 Scope of authorization.
- 25.531 Revocation of authorization.
- 3. Section 25.113 is amended by revising paragraphs (a), (b), and (f) and adding new paragraph (g) to read as follows:
- § 25.113 Construction Permits, Station Licenses, Launch Authority.
- (a) Except as provided in paragraph (b) of this section or in 25.131, construction permits must be obtained for all fixed, temporary fixed or mobile earth stations governed by this Part. Simultaneous application for a construction permit and station license may be made for all earth station facilities governed by this Part.
- (b) Construction permits are not required for fixed, temporary fixed or mobile satellite earth stations that operate with INTELSAT or INMARSAT space stations or for fixed, temporary fixed or mobile earth stations that operate with U.S.-licensed space stations. Construction of such stations may commence prior to grant of a license at the applicant's own risk. Applicants must comply with the provisions of 47 CFR 1.1312 relating to environmental processing prior to commencing construction.

- (f) Construction permits are not required for U.S.-licensed space stations. Construction of such stations may commence, at the applicant's own risk, prior to grant of a license. Prior to commencing construction, however, applicants must notify the Commission in writing that they plan to begin construction at their own risk.
- (g) A launch authorization and station license (i.e., operating authority) must be applied for and granted before a space station may be launched and operated in orbit. Request for launch authorization may be included in an application for space station license. However, an application for authority to launch and operate an on-ground spare satellite will be considered to be a newly filed application for cut-off purposes, except where the space station to be launched is determined to be an emergency replacement for a previously authorized space station that has been lost as a result of a launch failure or a catastrophic in-orbit failure.

- 4. Section 25.114 is amended to read as follows:
- § 25.114 Applications for space station authorizations.
- (a) A comprehensive proposal shall be submitted for each proposed space station on FCC Form 312, Main Form, together along with attached exhibits as described in paragraph (c) of this section. If an applicant is proposing more than one space station, information common to all space stations may be submitted in a consolidated system proposal.
- (b) Each application for a new or modified space station authorization must constitute a concrete proposal for Commission evaluation, although the applicant may propose alternatives that increase flexibility in accommodating the satellite in orbit. Each application must also contain the formal waiver required by Section 304 of the Communications Act, 47 U.S.C. 304. The technical information for a proposed satellite system need not be filed on any prescribed form but should be complete in all pertinent details. The format of the applications should conform to the specifications of § 1.49 of this chapter.
- (c) The following information in narrative form shall be contained in each application:
- (1) Name, address, and telephone number of the applicant.
- (2) Name, address, and telephone number of the person(s), including counsel, to whom inquiries or correspondence should be directed.
- (3) Type of authorization requested (e.g., launch authority, station license, modification of authorization).
- (4) General description of overall system facilities, operations and services.
- (5) Radio frequencies and polarization plan (including beacon, telemetry, and telecommand functions), center frequency and polarization of transponders (both receiving and transmitting frequencies), emission designators and allocated bandwidth of emission, final amplifier output power (identify any net losses between output of final amplifier and input of antenna and specify the maximum EIRP for each antenna beam), identification of which antenna beams are connected or switchable to each transponder and TT&C function, receiving system noise temperature, the relationship between satellite receive antenna gain pattern and gain-to-temperature ratio and saturation flux density for each antenna beam (may be indicated on antenna gain plot), the gain of each transponder channel (between output of receiving antenna and input of transmitting antenna) including any adjustable gain step capabilities, and predicted receiver and transmitter channel filter response characteristics.
- (6)(i) For satellites in geostationary-satellite orbit, orbital location, or locations if alternatives

are proposed, requested for the satellite, the factors that support such an orbital assignment, the range of orbital locations from which adequate service can be provided and the basis for determining that range of orbital locations, and a detailed explanation of all factors that would limit the orbital arc over which the satellite could adequately serve its expected users.

- (ii) For satellites in non-geostationary-satellite orbits, the number of space stations and applicable information relating to the number of orbital planes, the inclination of the orbital plane(s), the orbital period, the apogee, the perigee, the argument(s) of perigee, active service arc(s), and right ascension of the ascending node(s).
- (iii) For 1.6/2.4 GHz Mobile-Satellite Service space stations, the feeder link frequencies requested for the satellite, together with the demonstration required by §§ 25.203 (j) and (k).
- (7) Predicted space station antenna gain contour(s) for each transmit and each receive antenna beam and nominal orbital location requested. These contour(s) should be plotted on an area map at 2 dB intervals down to 10 dB below the peak value of the parameter and at 5 dB intervals between 10 dB and 20 dB below the peak values, with the peak value and sense of polarization clearly specified on each plotted contour.
- (8) A description of the types of services to be provided, and the areas to be served, including a description of the transmission characteristics and performance objectives for each type of proposed service, details of the link noise budget, typical or baseline earth station parameters, modulation parameters, and overall link performance analysis (including an analysis of the effects of each contributing noise and interference source).
- (9) For satellites in geostationary-satellite orbit, accuracy with which the orbital inclination, the antenna axis attitude, and longitudinal drift will be maintained.
- (10) Calculation of power flux density levels within each coverage area and of the energy dispersal, if any, needed for compliance with § 25.208.
- (11) Arrangement for tracking, telemetry, and control.
- (12) Physical characteristics of the space station including weight and dimensions of spacecraft, detailed mass (on ground and in-orbit) and power (beginning and end of life) budgets, and estimated operational lifetime and reliability of the space station and the basis for that estimate.
- (13) Detailed information demonstrating the financial qualifications of the applicant to construct and launch the proposed satellites. Applications shall provide the financial information required by § 25.140(b)-(e), § 25.142(a)(4), or § 25.143(b)(3), as appropriate.

- (14) A clear and detailed statement of whether the space station is to be operated on a common carrier basis, or whether non-common carrier transactions are proposed. If non-common carrier transactions are proposed, describe the nature of the transactions and specify the number of transponders to be offered on a non-common carrier basis.
- (15) Dates by which construction will be commenced and completed, launch date, and estimated date of placement into service.
- (16) Public interest considerations in support of grant.
- (17) Applications for authorizations for domestic fixed-satellite space stations shall also include the information specified in § 25.140.
- (18) Applications for authorizations in the Radiodetermination Satellite Service shall also include the information specified in § 25.141.
- (19) Applications for authorizations in the Mobile-Satellite Service in the 1545-1559/1646.5-1660.5 MHz frequency bands shall also provide all information necessary to comply with the policies and procedures set forth in Rules and Policies Pertaining to the Use of Radio Frequencies in a Land Mobile Satellite Service, 52 FR 4017 (Feb. 9, 1987), 2 FCC Rcd 485 (1987).
- (20) Applications to license multiple space station systems in the non-voice, non-geostationary mobile-satellite service under blanket operating authority shall also provide all information specified in § 25.142.
- (21) Applications for authorizations in the 1.6/2.4 GHz Mobile-Satellite Service shall also provide all information specified in § 25.143.
- (d) Applicants requesting authority to launch and operate a system comprised of technically identical, non-geostationary satellite orbit space stations may file a single "blanket" application containing the information specified in paragraph (c) of this section for each representative space station.
- 5. Section 25.115 is amended by revising paragraphs (a), (b), and (c)(1)-(d) to read as follows:
- § 25.115 Application for earth station authorizations.
- (a) Transmitting earth stations. Except as provided under § 25.113(b), Commission authorization must be obtained for authority to construct and/or operate a transmitting earth station. Applications shall be filed on FCC Form 312, Main Form and Schedule B, and

include the information specified in § 25.130.

- (b) Receive-only earth stations. Applications to license or register receive only earth stations shall be filed on FCC Form 312, Main Form and Schedule B, and conform to the provisions of § 25.131.
- (c) Large Networks of Small Antennas operating in the 12/14 GHz bands with U.S. satellites for domestic services. Applications to license small antenna network systems operating in the 12/14 GHz frequency band under blanket operating authority shall be filed on FCC Form 312, Main Form and Schedule B, for each large (5 meters or larger) hub station, and Schedule B for each representative type of small antenna (less than 5 meters) operating within the network.
- (d) User transceivers in the NVNG and 1.6/2.4 GHz Mobile-Satellite Service need not be individually licensed. Service vendors may file blanket applications for transceivers units using FCC Form 312, Main Form and Schedule B, and specifying the number of units to be covered by the blanket license. Each application for a blanket license under this section shall include the information described in § 25.135.
- 6. Section 25.117 is amended by revising the first sentence of paragraph (a) to read as follows:
- § 25.117 Modification of station license.
- (a) Except as provided for in § 25.118 (Modifications not requiring prior authorization), no modification of a radio station governed by this part which affects the parameters or terms and conditions of the station authorization shall be made except upon application to and grant of such application by the Commission. No license modification will be required if the licensee seeks to access another U.S.-licensed fixed satellite provided:
- \* \* \* \* \*
- 7. Sections 25.118 through 25.120 are redesignated Sections 25.119 through 25.121 and a new Section 25.118 is added to read as follows:
- § 25.118 Modifications not requiring prior authorization.
- (a) Equipment in an authorized earth station may be replaced without prior authorization or prior notification if the new equipment is electrically identical to the existing equipment. Licensees must notify the Commission using FCC Form 312, Main Form, within 30 days after the new equipment is installed.
- (b) A licensee providing service on a private carrier basis may change its operations to

common carrier status without obtaining prior Commission authorization. The licensee must notify the Commission using Form 312 within 30 days after the completed change to common carrier status.

- (c) Licensees may make changes to their authorized earth stations without obtaining prior Commission authorization if frequency coordination procedures, as necessary, are complied with in accordance with Section 25.251, and the modification *does not* involve:
- (1) an increase in EIRP or EIRP density (both main lobe and side lobe);
- (2) an increase in transmitted power;
- (3) a change in coordinates of more than 1 second for stations operating in C-Band or 10.95 to 11.7 GHz;
- (4) a change in coordinates of 10 seconds or greater for stations operating in Ku-band;
- (5) an addition to an antenna facility, including hub earth stations and remote terminals, that is already licensed, except for VSAT remote terminals.

Licensees must notify the Commission using FCC Form 312 within 30 days after the modification is completed.

- 8. In newly redesignated Section 25.119, paragraphs (c), (d) and (f) are amended to read as follows:
- § 25.119 Assignment or transfer of control of station authorization.

\* \* \* \* \* \*

- (c) Assignment of license. FCC Form 312, Main Form and Schedule A, shall be submitted to assign voluntarily (as by, for example, contract or other agreement) or involuntarily (as by, for example, death, bankruptcy, or legal disability) the station authorization. In the case of involuntary assignment, the application should be filed within 10 days of the event causing the assignment. FCC Form 312, Main Form, and Schedule A shall also be used for non-substantial (*pro forma*) assignments.
- (d) Transfer of control of corporation holding license. FCC Form 312, Main Form and Schedule A, shall be submitted in order to transfer voluntarily or involuntarily (*de jure or de facto*) control of a corporation holding any licenses. In the case of involuntary transfer of control, the applications should be filed within 10 days of the event causing the transfer of control. FCC Form 312, Main Form and Schedule A shall also be used for non-substantial (*pro forma*) transfers of control.

\* \* \* \* \*

(f) Assignments and transfers of control shall be completed within 60 days from the date of

authorization. Within 30 days of consummation, the Commission shall be notified by letter of the date of consummation and the file numbers of the applications involved in the transaction.

- 9. In newly redesignated Section 25.120, the last sentence of paragraph (a) is amended to read as follows:
- § 25.120 Application for special temporary authorization.
- (a) \* \* \* A copy of the request for special temporary authority also shall be forwarded to the Commission's Columbia Operations Center in Columbia, Maryland.

\* \* \* \* \*

- 10. In newly redesignated Section 25.121, paragraph (a) is amended to read as follows:
- § 25.121 License term and renewals.
- (a) License term. Licenses for facilities governed by this Part will be issued for a period of 10 years.

\* \* \* \* \*

- 11. Section 25.130 is amended by revising paragraph (a) to read as follows:
- § 25.130 Filing requirements for transmitting earth stations.
- (a) Application for a new or modified transmitting earth station facility shall be submitted on FCC Form 312, Main Form and Schedule B, accompanied by any required exhibits.

\* \* \* \* \*

- 12. Section 25.131 is amended by revising paragraphs (a), (d), and (j) to read as follows:
- § 25.131 Filing requirements for receive-only earth stations.
- (a) Except as provided in paragraphs (b) and (j) of this section, applications for a license for a receive-only earth station shall be submitted on FCC Form 312, Main Form and Schedule B, accompanied by any required exhibits.

(d) Applications for registration shall be filed on FCC Form 312, Main Form and Schedule B, accompanied by the coordination exhibit required by 25.203, and any other required exhibits. Any application that is deficient or incomplete in any respect shall be immediately returned to the applicant without processing.

\* \* \* \* \*

- (j) Receive-only earth stations operating with (1) INTELSAT space stations, or (2) U.S.-licensed and non-U.S. space stations for reception of services from other countries; shall file an FCC Form 312, Main Form and Schedule B, requesting a license for such station. Receive-only earth stations used to receive INTELNET I services from INTELSAT space stations need not file for licenses. *See* Deregulation of Receive-Only Satellite Earth Stations Operating with the INTELSAT Global Communications Satellite System, Declaratory Ruling, RM No. 4845, FCC 86-214 (released May 19, 1986).
- 13. Section 25.134 is amended by revising the first sentences of paragraphs (a) and (b) and adding paragraph (d) to read as follows:
- § 25.134 Licensing Provisions of Very Small Aperture Terminal (VSAT) Networks.
- (a) All applications for digital VSAT networks with a maximum outbound downlink EIRP density of +6.0 dBW/4 kHz per carrier and earth station antennas with maximum input power density of -14 dBW/4 kHz and maximum hub EIRP of 78.3 dBW will be processed routinely.
- (b) Each applicant for digital and/or analog VSAT network authorization proposing to use transmitted satellite carrier EIRP densities in excess of +6.0 dBW/4 kHz and +13.0 dBW/4 kHz, respectively, and/or maximum antenna input power densities of -14.0 dBW/4 kHz and maximum hub EIRPs of 78.3 dBW and -8.0 dBW/4 kHz per carrier, respectively, shall conduct an engineering analysis using the Sharp, Adjacent Satellite Interference Analysis (ASIA) program. \* \* \*

- (d) An application for VSAT authorization shall be filed on FCC Form 312, Main Form and Schedule B. A VSAT licensee applying to renew its license must include on FCC Form 405, the number of constructed VSAT units in its network.
- 14. Section 25.140 is amended to read as follows:
- § 25.140 Qualifications of fixed-satellite space station licensees.

- (a) New fixed-satellites shall comply with the requirements established in Report and Order CC Docket No. 81-704. The requirements for radio station applications for new fixed-satellites are specified in Appendix B to the Commission 1983 Processing Order (93 FCC2d 1260 (1983)). Applications must also meet the requirements in paragraphs (b) through (d) of this section. The Commission may require additional or different information in the case of any individual application. Applications will be unacceptable for filing and will be returned to the applicant if they do not meet the requirements referred to in this paragraph.
- (b) Each applicant for a space station authorization in the fixed-satellite service must demonstrate, on the basis of the documentation contained in its application, that it is legally, financially, technically, and otherwise qualified to proceed expeditiously with the construction, launch and/or operation of each proposed space station facility immediately upon grant of the requested authorization. Each applicant must provide the following information:
- (1) The information specified in § 25.114.
- (2) An interference analysis to demonstrate the compatibility of its proposed system 2 degrees from any authorized space station. An applicant should provide details of its proposed r.f. carriers which it believes should be taken into account in this analysis. At a minimum, the applicant must include, for each type of r.f. carrier, the link noise budget, modulation parameters, and overall link performance analysis. (See, e.g., appendices B and C to Licensing of Space Stations in the Domestic Fixed-Satellite Service, 48 FR 40233 (September 6, 1983).)
- (3) The estimated costs of proposed construction and/or launch, and any other initial expenses for the space station(s); and
- (4) Estimated operating expenses for one year after launch of the proposed space station(s).
- (c) Each application for authority to construct and/or launch and operate a space station shall demonstrate the applicant's current financial ability to meet the costs specified in paragraphs (b)(3) and (4) of this section by submitting the following financial information verified by affidavit:
- (1) A balance sheet current for the latest fiscal year and documentation of any financial commitments reflected in the balance sheet (such as, for example, loan agreements and service contracts) together with an exhibit demonstrating that the applicant has current assets and operating income sufficient to meet the costs specified in paragraphs (b)(3) and (4) of this section. If the applicant is owned by more than one corporate parent, it must submit evidence of a commitment to the proposed satellite program by management of the corporate parent upon whom it is relying for financial resources;

- (2) If the submissions of paragraph (c)(1) of this section do not reflect sufficient financial resources to meet the costs specified in paragraphs (b)(3) and (4) of this section, the applicant shall submit additional information as listed below.
- (i) The terms of any fully negotiated loan or other form of credit arrangement intended to be used to finance the proposed construction, acquisition, or operation of the requested facilities including such information as the identity of the creditor (or creditors), the amount committed, letters of commitment, detailed terms of the transaction, including the details of any contingencies, and a statement that the applicant complies with paragraph (d) of this section:
- (ii) The terms of any fully negotiated sale or placement of any equity or other form of ownership interest, including the sale, or long-term lease for the lifetime of the satellite, of proposed satellite transponder capacity in the level of detail as specified in paragraph (c)(2)(i) of this section:
- (iii) The terms of any grant or other external funding commitment intended to be used to finance the proposed construction, acquisition, or operation of the requested facilities, including such information as the identity of the grantor(s), the amount committed, letters of commitment, and detailed terms of the transaction, including the details of any contingencies;
- (iv) Any financing arrangements contingent on further performance by either party, such as marketing of satellite capacity or raising additional financing, will not be considered in evaluating an applicant's financial qualifications.
- (3) Whatever other information or details the Commission may require with regard to a specific application or applicant;
- (d) Any loan or other credit arrangement providing for a chattel mortgage or secured interest in any proposed facility must include a provision for a minimum of ten (10) days prior written notification to the licensee or permittee, and to the Commission, before any such equipment may be repossessed under any default provision of the agreement.
- (e) An applicant found to be qualified pursuant to this section may be initially assigned up to two orbital locations in each pair of frequency bands proposed. Authorizations to construct ground spares are at the applicant's risk that launch authorization will not be granted by the Commission.
- (f) Each applicant found to be qualified pursuant to this section may be assigned no more than one additional orbital location beyond its current authorizations in each frequency band in which it is authorized to operate, provided that its in-orbit satellites are essentially filled and that it has no more than two unused orbital locations for previously authorized but

unlaunched satellites in that band.

- (g) In the event that one or more applications satisfying the requirements of this section are ready for grant, any orbital location occupied by a satellite that is determined to be a part of a system that is not essentially filled may be cancelled and collocation of in-orbit satellites may be required. The Commission may take this action if, in so doing, it would allow the grant of pending applications that satisfy the requirements of this section. If a cancellation is made, the licensee will be afforded a period of 30 days to notify the Commission which of its assigned locations should be cancelled.
- 15. Section 25.141 is amended by revising paragraph (c) to read as follows:
- § 25.141 Licensing provisions for the radiodetermination satellite service.

\* \* \* \* \*

(c) User transceivers. Individual user transceivers will not be licensed. Service vendors may file blanket applications for transceiver units using FCC Form 312, Main Form and Schedule B, and specifying the number of units to be covered by the blanket license. Each application must demonstrate that transceiver operations will not cause interference to other users of the spectrum.

\* \* \* \* \*

- 16. Section 25.142 is amended by revising paragraph (c) to read as follows:
- § 25.142 Licensing provisions for the non-voice, non-geostationary mobile-satellite service.

\* \* \* \* \*

(c) Reporting requirements. All operators of non-voice, non-geostationary mobile-satellite service systems shall, on June 30 of each year, file a report with the International Bureau and the Commission's Columbia Operations Center in Columbia, Maryland, containing the following information current as of May 31st of that year:

\* \* \* \* \*

- 17. Section 25.143 is amended by revising paragraph (e)(1) to read as follows:
- § 25.143 Licensing provisions for the 1.6/2.4 GHz Mobile-Satellite Service.

(e)(1) All operators of 1.6/2.4 GHz mobile-satellite systems shall, on June 30 of each year, file with the International Bureau and the Commission's Columbia Operations Center, Columbia, Maryland, a report containing the following information current as of May 31st of that year:

\* \* \* \* \*

- 18. Section 25.155 is amended by revising paragraph (b) to read as follows:
- § 25.155 Mutually exclusive applications.

\* \* \* \* \*

- (b) A space station application will be entitled to comparative consideration with one or more conflicting applications only if:
- (1) The application is mutually exclusive with another application; and
- (2) The application is received by the Commission in a condition acceptable for filing by the "cut-off" date specified in a public notice.
- 19. Section 25.210 is amended by revising paragraphs (j) and (j)(3), to read as follows:
- § 25.210 Technical requirements for space stations in the Fixed-Satellite Service.

\* \* \* \* \*

- (j) All operators of space stations shall, on June 30 of each year, file a report with the International Bureau and the Commission's Columbia Operations Center in Columbia, Maryland, containing the following information current as of May 31st of that year:
- (1) \* \* \*
- (2) \* \* \* \*
- (3) A detailed description of the utilization made of each transponder on each of the in-orbit satellites. This description should identify the total capacity or the percentage of time each transponder is actually used for transmission, and the amount of unused system capacity in the transponder. This information is not required for those transponders that are sold on a non-common carrier basis. In that case, operators should indicate the number of transponders sold on each in-satellite orbit.

\* \* \* \* \*

20. Section 25.211 is amended by adding paragraph (d), to read as follows:

- § 25.211 Video Transmissions in the Fixed-Satellite Service.
- \* \* \* \* \*
- (d) In the 6 GHz band, an earth station with an equivalent diameter of 9 meters or smaller may be routinely licensed for transmission of full transponder services if the maximum power into the antenna does not exceed 450 watts (26.5 dBW). In the 14 GHz band, an earth station with an equivalent diameter of 5 meters or smaller may be routinely licensed for transmission of full transponder services if the maximum power into the antenna does not exceed 500 watts (27 dBW).
- 21. Section 25.212 is amended by adding paragraphs (c) and (d), to read as follows:
- § 25.212 Narrowband transmissions in the Fixed-Satellite Service.
- \* \* \* \* \*
- (c) In the 14 GHz band, an earth station with an equivalent diameter of 1.2 meters or greater may be routinely licensed for transmission of narrowband analog services with bandwidths up to 200 kHz if the maximum input power density into the antenna does not exceed -8 dBW/4 kHz and the maximum transmitted satellite carrier EIRP density does not exceed 13 dBW/4 kHz, and for transmission of narrowband and/or wideband digital services, if the maximum input power density into the antenna does not exceed -14 dBW/4 kHz and the maximum transmitted satellite carrier EIRP density does not exceed +6.0 dBW/kHz.
- (d) In the 6 GHz band, an earth station with an equivalent diameter of 4.5 meters or greater may be routinely licensed for transmission of SCPC services if the maximum power densities into the antenna do not exceed +0.5 dBW/4 kHz for analog SCPC carriers with bandwidths up to 200 kHz, and do not exceed -2.7 dBW/4 kHz for narrow and/or wideband digital SCPC carriers.
- 22. Section 25.251 is amended to read as follows:
- § 25.251 Special requirements for coordination.
- (a) The administrative aspects of the coordination process are set forth in §§ 21.100(d) and 21.706(c) and (d) of this chapter in the case of coordination of terrestrial stations with earth stations, and in § 25.203 in the case of coordination of earth stations with terrestrial stations.
- (b) The technical aspects of coordination are based on Appendix 28 of the International Telecommunications Union Radio Regulations and certain recommendations of the ITU Radiocommunication Sector ("ITU-R").

- 23. Sections 25.252-25.256 are removed.
- 24. Section 25.272 is amended by revising the first sentence of paragraph (b) to read as follows:
- § 25.272 General inter-system coordination procedures.

\* \* \* \* \*

(b) Each space station licensee shall maintain on file with the Commission and with its Columbia Operations Center in Columbia, Maryland a current listing of the names, titles, addresses and telephone numbers of the points of contact for resolution of interference problems. \* \* \*

\* \* \* \* \*

- 25. Section 25.274 is amended by revising the first sentence of paragraph (f) to read as follows:
- § 25.274 Procedures to be followed in the event of harmful interference.

\* \* \* \* \*

(f) At any point, the system control center operator may contact the Commission's Columbia Operations Center in Columbia, Maryland to assist in resolving the matter.\* \*

\* \* \* \* \*

- 26. Section 25.277 is amended by revising paragraph (c) to read as follows:
- § 25.277 Temporary fixed earth station operations.

\* \* \* \* \*

(c) The licensee of an earth station which is authorized to conduct temporary fixed operations in bands shared co-equally with terrestrial fixed stations shall provide the following information to the Director of the Columbia Operations Center at P.O. Box 250, Columbia, Maryland 21045 and to the licensees of all terrestrial facilities lying within the coordination contour of the proposed temporary fixed earth station site before beginning transmissions:

- 27. A new Section 25.280 is added to read as follows:
- § 25.280 Inclined orbit operations.
- (a) Satellite operators may commence operation in inclined orbit mode without obtaining prior Commission authorization provided that the Commission is notified by letter within 30 days after operators commence. The notification shall include: (1) the operator's name; (2) the date of commencement of inclined orbit operation; (3) the initial inclination; (4) the rate of change in inclination per year; and (5) the expected end-of-life of the satellite accounting for inclined orbit operation.
- (b) Licensees operating in inclined-orbit are required to:
- (1) periodically correct the satellite altitude to achieve a stationary spacecraft antenna pattern on the surface of the Earth and centered on the satellite's designated service area;
- (2) control all interference to adjacent satellites, as a result of operating in an inclined orbit, to levels not to exceed that which would be caused by the satellite network operating without an inclined orbit;
- (3) not claim protection in excess of the protection that would be received by the satellite network operating without an inclined orbit; and
- . (4) continue to maintain the space station at the authorized longitude orbital location in the geostationary satellite arc with the appropriate east-west station-keeping tolerance.
- 28. Section 25.308 is redesignated Section 25.281.
- 29. Subpart E is removed and reserved.

# APPENDIX C

# **FORMS**

FCC 312

# FEDERAL COMMUNICATIONS COMMISSION APPLICATION FOR SATELLITE SPACE AND EARTH STATION AUTHORIZATIONS

#### Information and Instructions

#### Purpose of Form

FCC Form 312 is used to apply for all authorizations relating to satellite earth and space station facilities, and to notify the Commission of changes to these facilities in cases where prior Commission approval is not required. Specifically, applicants should use FCC Form 312 in the following cases: (1) when applying for a license for a new earth or space station(s); (2) when applying for registration of a domestic receive-only earth station(s); (3) when applying for a modification to a licensed earth or space station(s); (4) when seeking Commission consent to an assignment or transfer of control of a licensed earth or space station(s); (5) when notifying the Commission of a minor modification to a licensed earth or space station(s); (6) when notifying the Commission of an assignment or transfer of control of a registered domestic receive-only earth station(s); and (7) when filing an amendment to a pending earth or space station application(s). The purpose of this form is to collect data and other information relating to satellite space and earth stations to assist the FCC in determining whether the public interest would be served by a grant of the requested authorization.

#### Applicable Rules and Regulations

Before the application is prepared, the applicant should refer to Part 25 of the Rules and Regulations of the Commission, (Title 47, Code of Federal Regulations (CFR), Part 25). Copies of the FCC Rules may be purchased from the Superintendent of Documents, Mail Stop: SSOP, U.S. Government Printing Office, Washington, DC 20402-9328. Part 25 may require information to be filed with an application in addition to that specified in the application form. Applicant should make every effort to file a complete application in compliance with the Rules. Failure to do so can result in rejection or return of the application or a delay in the processing of the application. Use additional sheets only where necessary. All additional sheets must contain the applicant's name and the number of question to which it responds.

#### Introduction

FCC Form 312 is a multi-part form comprised of a Main Form and schedules. Each application must contain a completed Main Form in addition to any required schedules in order to receive consideration.

The purpose of the mandatory Main Form is to (1) obtain information sufficient to identify the applicant; (2) establish the applicant's basic eligibility and qualifications; (3) classify the filing; and (4) identify the nature of the proposed service or request. The Main Form also contains required certifications and signature block(s). Space is also provided for fee filing information. (Refer to the International and Satellite Services Fee Filing Guide for specific fee information.)

# **Schedules**

There are two schedules -- Schedule A and Schedule B -- that are used in conjunction with the mandatory Main Form.

#### SCHEDULE A is to be completed when:

Applying for Consent to Assignment of License of both space and earth stations
Applying for Consent to Transfer of Control of both space and earth stations
Notifying the FCC of Assignment or Transfer of Control of Receive-Only earth station
Registration

#### **SCHEDULE B** is to be completed when:

Applying for a License for a Transmit and/or Receive Earth Stations
Applying for Registration of Domestic Receive-only Earth Stations
Applying for Blanket License for New Earth Station System, including VSAT and
Mobile Satellite Service Systems

Amending a <u>pending</u> earth or space station Application
Applying for a Modification of a <u>granted</u> earth station, VSAT, or space station license
Applying for a Modification of a <u>granted</u> Receive-only earth station Registration
Notifying FCC of a Minor Modification of a <u>granted</u> earth station or VSAT license

#### For Assistance

For additional information about Form 312 contact the FCC Consumer Assistance Office at (202) 418-0220. Information is also available on the FCC's internet site at <a href="http://www.fcc.gov">http://www.fcc.gov</a>. Examples of completed Form 312 applications are available on the FCC's internet site. The International and Satellite Services Fee Filing Guide is available on the International Bureau's Home Page at the above internet address.

#### Incorporation by Reference

Reference documents, exhibits, or other lengthy showings already on file with the FCC may be referred to in the application without further submission only if: (a) the information is

current and accurate in all significant respects <u>and</u> (b) the reference states specifically where the previously filed information can be found (<u>i.e.</u>, station call sign and application file number, title of proceeding, docket number or legal citations), including exhibit and page references. If either of these criterion is not met, the reference documents must accompany the application.

#### **GENERAL INSTRUCTIONS**

#### **Current Information**

Information filed with the FCC must be kept current. The applicant should notify the FCC regarding any substantial and significant changes in the facts as they appear in the application. See 47 CFR 1.65.

#### Waiver Requests

Requests for waivers must contain a statement of reasons sufficient to justify a waiver and must be included as "Exhibit D" to the Main Form. For each rule waiver desired, a separate request with the required showing identifying the specific rule or policy for which the waiver is requested, must be made.

#### **Exhibits**

Each document required to be filed as an exhibit should be current as of the date of filing. Each exhibit must be identified by a letter. Each page of each exhibit must be identified by exhibit and page number using the following format: Exhibit A, Page 2 of 3. If material is to be incorporated by reference within the exhibit, see the instruction on incorporation by reference. If interference studies, frequency coordination reports, radiation hazard reports, environmental impact statements, etc., are required by rule, include them as exhibits. The letter assigned to the specific exhibits requested on the Main Form and Schedules must correspond to the stated exhibit letter on the Form. The letter assigned to all other exhibits not specifically requested on the Form should be other that A-J, which are specifically requested on the Form. The exhibit letter should be referenced wherever applicable.

#### Filing of Applications

An original and two copies of the completed application(s) must be submitted along with the correct filing fee amount. The original application and the duplicate thereof must be clearly marked as such. **DO NOT SEND CASH.** Payment can generally be made by check, bank draft, credit card, money order, or by pre-arrangement. For detailed information regarding fees refer to the International and Satellite Services Fee Filing Guide.

#### **Mailing of Applications**

Completed applications concerning earth stations should be mailed to: Federal Communications Commission International Bureau-Earth Station P.O. Box 358160 Pittsburgh, Pennsylvania 15251-5160

Completed applications concerning space stations should be mailed to:

rederal Communications Commission International Bureau-Space Station P.O. Box 358210 Pittsburgh, Pennsylvania 15251-5210

When delivering feeable applications by hand or by courier, use the following address:

Federal Communications Commission c/o Mellon Bank Three Mellon Bank Center 535 William Penn Way 27th Floor, Room 153-2713

Pittsburgh, Pennsylvania

(Attention: Wholesale Lockbox Shift Supervisor).

Applications received before midnight on a normal business day will receive that day's date as the receipt date. Deliveries made after midnight on Fridays will not be "officially" receipted until the next Monday. Applications received on weekends and government holidays are dated the next regular business day. See the FCC International and Satellite Services Fee Filing Guide for fee information.

#### **Additional Information**

All information provided in this form will be available for public inspection. If information requested on the form is not provided, processing of the application may be delayed or the application may be returned without action pursuant to FCC rules.

#### Paperwork Reduction and Privacy Act Notice

The solicitation of personal information requested in this form is authorized by the Communications Act of 1934, as amended. The FCC will use the information provided in this form to determine whether grant of this application is in the public interest. In reaching that determination, or for law enforcement purposes, it may become necessary to refer personal information contained in this form to another government agency.

Public reporting burden for this collection is estimated to be 10 to 20 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of